

# University of Worcester Travel Plan 2018/19 - 2016

## Survey Update

## I Introduction

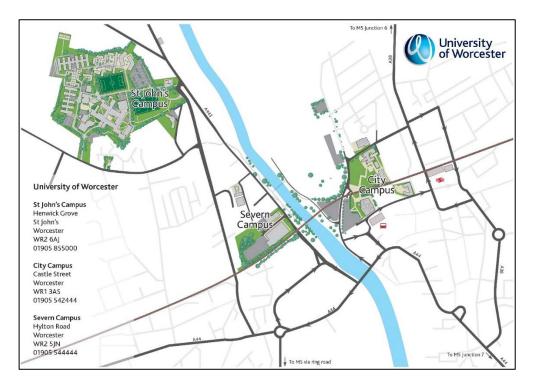
1.1 Phil Jones Associates (PJA) has been commissioned by the University of Worcester (UoW) to provide an update to the University's existing 2013- 2018/19 Travel Plan.

#### Sustainable Transport Strategy

1.2 PJA produced a Travel Plan for the UoW in 2013, providing a sustainable transport strategy for the site. This update note has been produced to reflect new staff and student survey data, and to include the new and expanded University property portfolio, and will outline a revised travel strategy going forward.

#### **New Sites**

1.3 The University has recently acquired a number of sites, expanding Severn and City campuses with new buildings adjacent to the existing sites. Furthermore, the Top Barn Farm Activity Centre has been acquired by the university, and is to be referred to as 'Lakeside Campus'. The campus is located approximately 7.6km to the north of the St John's campus on Hallow Road. The location of the three main campuses is provided in Figure 1-1.



#### Figure 1-1: University of Worcester Site Map

#### LOCATION

Seven House High Street, Longbridge Birmingham B31 2UQ TELEPHONE EMAIL

+44 (0) 121 475 0234 birmingham@philjonesassociates.co.uk WEBSITE philjonesassociates.co.uk

1.4 The University has also acquired land off Oldbury Road earmarked for development as a student halls of residence to be named 'University Court'. The project is currently in the masterplanning stage, with its location in relation to the existing St John's Campus shown in Figure 1-2.

The second second

#### Figure 1-2: University Court Accommodation Location

#### Structure of the Document

- 1.5 The remainder of the document is divided into 7 further sections:
  - Section 2 compares the historical travel situation at the main campus sites with recent staff travel survey data;
  - Section 3 compares the historical travel situation at the main campus sites with recent student travel survey data;
  - Section 4 compares the historical inter-site travel situation with recent travel survey data;
  - Section 5 compares historical carbon emissions information with the recent survey data; and
  - Section 6 provides a commentary on progress towards the targets outlined in the previous Travel Plan;
  - Section 7 provides actions to optimise the University of Worcester Travel Plan 2016 2018.

## 2 Staff Travel

#### Overview

2.1 The main mode of travel used by staff to access the university has been identified from historical data (2009-2012) extracted from the 2013-2018 travel plan, as well as recent survey data (2013 and 2015) provided by the UoW. This information is outlined in Table 2-1:

Mode of Travel	Year								
	2009	2010	2011	2012	2013	2015			
Bus	4%	3%	4%	4%	10%	3%			
Bicycle	12%	10%	12%	11%	5%	7%			
On Foot	18%	15%	19%	18%	18%	23%			
Train	2%	4%	5%	6%	5%	5%			
Motorbike	0%	1%	0%	0%	-	0%			
Single Occupancy Vehicle (SOV)	55%	57%	53%	55%	54%	58%			
Car with others	4%	7%	3%	5%	8%	1%			
Other (Including combination)	4%	3%	4%	1%	1%	2%			

#### Table 2-1: Main Mode of Travel to Work - Staff

#### 2.2 Table 2-1 shows:

- There has been a slight fluctuation in the proportion of staff travelling to the university in a single occupancy vehicle, with the current level at a 6-year high of 58%;
- The number of staff travelling on foot has increased from 18% in 2009 to 23% in 2015;
- The number of staff cycling has increased since 2013, however it has shown an overall decline compared to 2009;
- The number of staff travelling by bus has returned to a status quo in 2015, following a rise in use in 2013; and
- The number of staff car sharing has decreased dramatically, from a 6-year high of 8% in 2013 to a low of 1% in 2015.
- 2.3 Information regarding the distance travelled by staff in SOVs is summarised in Table 2-2:

#### Table 2-2: Distance Travelled in Single Occupancy Vehicles - Staff

Mode of Travel	Year								
	2009	2010	2011	2013	2015				
Up to 1 mile	1%	1%	1%	1%	3%				
Over 1 mile and up to 2 miles	4%	4%	1%	4%	13%				
Over 2 miles and up to 4 miles	13%	18%	15%	12%	14%				
Over 4 miles and up to 10 miles	26%	21%	25%	27%	21%				
Over 10 miles and up to 20 miles	27%	25%	27%	22%	22%				

Over 20 miles and up to 50 miles	26%	26%	25%	29%	23%
Over 50 miles	2%	4%	6%	5%	4%

- 2.4 The information contained within Table 2-2 indicates that 30% of the staff that travel to the university in single occupancy vehicles travel less than four miles, representing an increase of 13% from 2013. In 2015 there was a sharp rise in the number of staff travelling in single occupancy vehicles between 1 and 2 miles, up from 4% in 2013 to 13% in 2015.
- 2.5 Table 2-3 outlines the reasons for staff travelling to work by private car:

Reason	Previous	Current
Convenience	19%	20%
Lack of an alternative	25%	14%
Health reasons	3%	1%
Sharing a lift	1%	2%
Dropping off/ collecting children	11%	17%
Cost saving	3%	2%
Time saving	22%	21%
Car essential to perform job	9%	12%
Other	7%	12%

#### Table 2-3: Reasons for Undertaking Journeys to University by Car - Staff

- 2.6 The previous Travel Plan sought to address the high percentage of staff who perceive a lack of alternative as the reason they travel to the university by car, with the percentage of staff who gave this answer falling by 11% since 2013. Other options have remained relatively stable over 2 years, with the exception of 'dropping off and collecting children', which has increased by 6%.
- 2.7 Table 2-4 details a number of measures designed to encourage staff to use public transport, with the percentage figure representing the most likely to encourage this modal shift.

### Table 2-4: Measures to Encourage Travel to Work by Public Transport - Staff

Reason	Previous	Current
More direct bus routes	23%	21%
More frequent bus service	20%	19%
Better provision of bus shelters	3%	3%
Discounts/ passes available at the university	23%	26%
Public transport information accessible at the university	6%	5%
Safer/improved footway links from the station to campus	5%	5%
Safer/improved footway links from home to the station	-	3%
Secure parking at the bus or train station	4%	5%
Other	16%	14%

- 2.8 Table 2-4 indicates that discounts and passes remained the most popular choice when compared with previous survey years, with 2% fewer respondents selecting 'more direct bus routes'.
- 2.9 Table 2-5 outlines responses to the question 'Which of the following would most encourage you to car share?'

Table 2-5: Measures to Encourage Travel to Encourage Car Sharing to Work (Staff)

Reason	Previous	Current
Not interested in car sharing	38%	46%
Help in finding car share partners with similar work patterns	27%	20%
Reserved parking for car sharers	4%	5%
Reduced car parking charges for car sharers	9%	6%
None of these	-	17%
Other	22%	6%

2.10 The number of staff who were not interested in car sharing to work has increased considerably from 38% to 46%. All other options selectable in both years have experience a decline.

## Staff Postcode Analysis

- 2.11 As per the original Travel Plan, the home postcode locations of all staff have been examined to identify where they are travelling to the University from. Figures 2-1 and 2-2 illustrate the home locations of staff across a wider regional area and also at more detailed level within Worcester.
- 2.12 It is estimated that 24% of staff live within a 2km walking distance of the site (1% less than 2013), with 45% resident within an 8km cycle distance (1% less than 2013). Figure 2-3 shows a 2km and 8km buffer from the site.

Figure 2-1: Home Location of Staff – Within Worcestershire

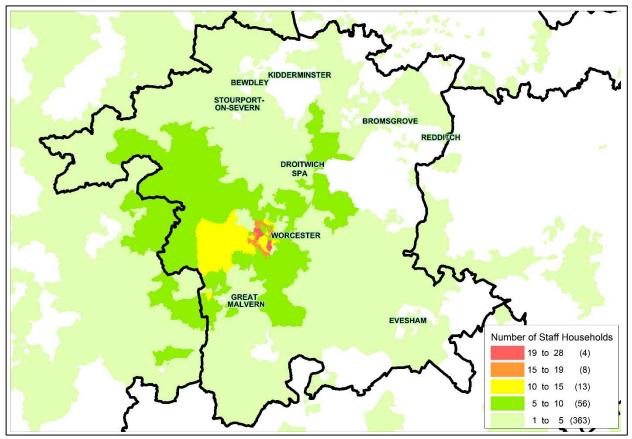
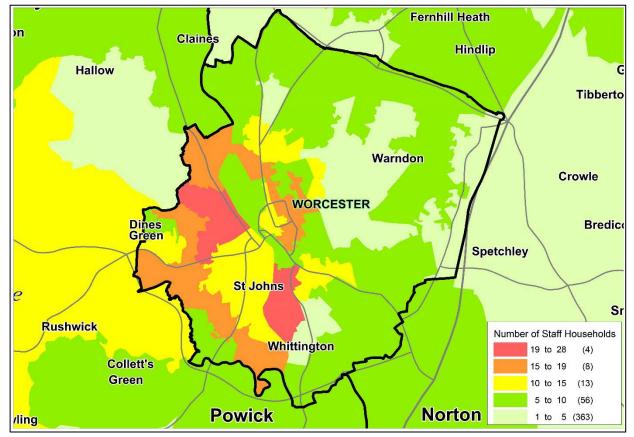
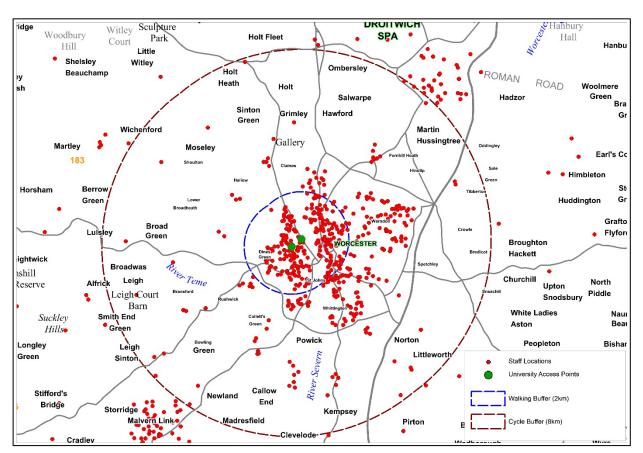


Figure 2-2: Home Location of Staff – Within Worcester





#### Figure 2-3: Staff Home Locations Within Walking and Cycling Catchments

## 3 Student Travel

#### Overview

3.1 The main mode of travel used by students to access the University has been identified from the travel survey and is summarised in Table 3-1.

Mode of Travel	Year								
	2010	2011	2012	2013	2015				
Bus	2%	3%	6%	6%	4%				
Bicycle	7%	8%	6%	4%	4%				
On Foot	38%	43%	45%	48%	47%				
Train	7%	8%	10%	11%	7%				
Motorbike	1%	1%	1%	1%	0%				
Car on your own	30%	28%	24%	24%	30%				
Car with others	9%	7%	6%	5%	4%				
Other (Including combination)	2%	3%	2%	1%	4%				

Table 3-1: Main Mode of Travel to University - Student

3.2 The number of students travelling in single occupancy vehicles has increased by 6% from 2013 to 2015, matching the all-time high of 30% in 2010. The number of students travelling by bicycle and on foot has remained relatively constant in the past three years, with the number travelling by bus decreasing by 2%.

3.3 The distance travelled by students in singular occupancy vehicles is summarised in Table 3-2.

 Table 3-2: Distance Travelled in Single Occupancy Vehicles - Students

	Year								
Mode of Travel	2010	2011	2013	2015					
Up to 1 mile	1%	1%	0%	2%					
Over 1 mile and up to 2 miles	4%	1%	2%	4%					
Over 2 miles and up to 4 miles	18%	15%	5%	9%					
Over 4 miles and up to 10 miles	21%	25%	19%	11%					
Over 10 miles and up to 20 miles	25%	27%	23%	23%					
Over 20 miles and up to 50 miles	26%	25%	48%	44%					
Over 50 miles	4%	6%	3%	8%					

3.4 The information contained within Table 3-2 illustrates that there has been an increase in the proportion of students who drive less than four miles to the site from 2013, from 7% to 15%. Students who travelled to the University by car were also asked to identify the reasoning behind their travel choice. The reasons for travel by car are detailed in Table 3-3.

#### Table 3-3: Reasons for Undertaking Journeys to University by Car - Student

Reason	Year							
Reason	2013	2015						
Time saving	16%	17%						
Cost saving	5%	5%						
Personal responsibilities	11%	12%						
Convenience	14%	15%						
Health reasons	1%	1%						
Personal security	2%	0%						
Public transport not available	6%	4%						
Distance from home	34%	35%						
Other	11%	10%						

3.5 The information presented in Table 3-3 indicates that the primary reasons for students to travel to the university by car remains as the distance from their home address. All reasons remain relatively constant from previous years' surveys. The surveys also sought to ascertain what measures would encourage greater use of public transport to and from the university. The results of this question are detailed in Table 3-4.

#### Table 3-4: Measures to Encourage Travel to University by Public Transport

Reason	Previous	Current
Better connection from home to the station	9%	10%
Better connection to university from the station	13%	13%
Public Transport information	8%	8%
Discount tickets/passes	31%	33%
Better provision of bus shelters	5%	3%
More frequent bus service	15%	15%
More direct bus routes	15%	15%
Other	4%	3%

3.6 The results indicate that the provision of discounted tickets and passes remains the most popular measure to encourage an increase in journeys by public transport.

#### Table 3-5: Measures to Encourage Travel to Encourage Car Sharing to Work (Student)

Reason	Previous	Current
Not interested in car sharing	22%	29%
Help in finding car share partners with similar work patterns	30%	28%
Reserved parking for car sharers	16%	14%
Reduced car parking charges for car sharers	28%	26%
Other	5%	3%

- 3.7 Table 3-5 indicates that the number of students not interested in car sharing has increased by 7%, which has been offset by decreases in the proportion of students providing positive responses to car sharing. It should be noted that 'Not interested in car sharing' now represents the most popular response.
- 3.8 Further results of the survey indicate that the number of students fully aware of the university's car sharing scheme has increased from 3% to 17%, however 56% of respondents still had no knowledge of the scheme.

### Home to University Travel

3.9 Students were also asked to identify their usual mode of travel between their 'home address' and their 'term time' address and also how often they make the journey. The results of this questions are detailed in Table 3-6.

Mode of Travel		ery kend	one	east ce a nth	tim	ist 2-3 es a ester	tł	during ne ester	Not	at all	No Ai	nswer	Tot	tals
	2013	2015	2013	2015	2013	2015	2013	2015	2013	2015	2013	2015	2013	2015
Aeroplane	0%	0%	0%	0%	1%	0%	7%	3%	3%	2%	0%	0%	11%	6%
Train	3%	2%	4%	4%	7%	5%	5%	3%	1%	1%	1%	3%	20%	18%
Coach	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%
Own car	4%	6%	3%	3%	2%	3%	2%	3%	1%	2%	3%	4%	14%	19%
Car with students at the university	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	1%	2%
Driven by a family member	0%	1%	2%	1%	2%	2%	3%	4%	1%	0%	0%	0%	8%	9%
N/A	6%	5%	0%	0%	1%	0%	0%	0%	8%	9%	25%	28%	41%	43%
Other	0%	1%	0%	0%	0%	0%	1%	0%	0%	0%	3%	1%	5%	2%
Total	13%	15%	10%	9%	14%	11%	18%	13%	14%	15%	32%	37%	100%	100%

Table 3-6: Mode and Frequency of Travel Between Home and Term Time Address

3.10 It is important to note:

- The number of students travelling in their own car has increased to 19% from 14% in 2013, with those travelling every weekend at 6%; and
- The number travelling by aeroplane has decreased from 11% to 6%; and
- The number of respondents not providing an answer to the question has increased by 5%.

## Student Postcode Analysis

3.11 As with staff, the home postcode locations of all students have been examined to identify where they are travelling to the University from. Figures 3-1 and 3-2 illustrate the home locations of students across a wider regional area and also at more detailed level within Worcester.

- 3.12 It is estimated that 45% students live within a 2km distance of the site (10% more than in 2013), with 52% resident within an 8km cycle distance (9% less than 2013). Figure 2-3 shows a 2km and 8km buffer from the site.
- 3.13 Given that approximately 10% more students live within 2km and 8km walking catchments than previously, there is clearly potential for a modal shift to more sustainable modes.

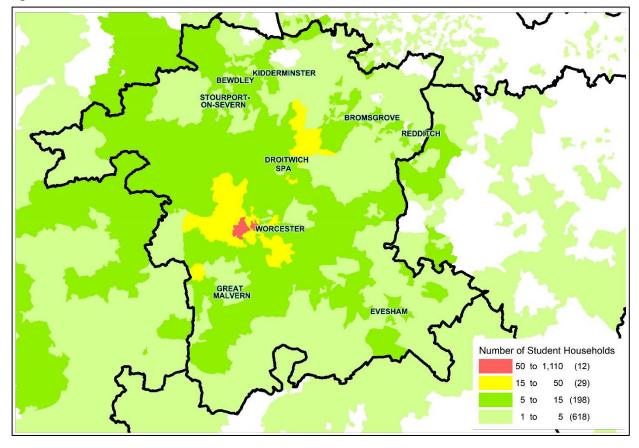
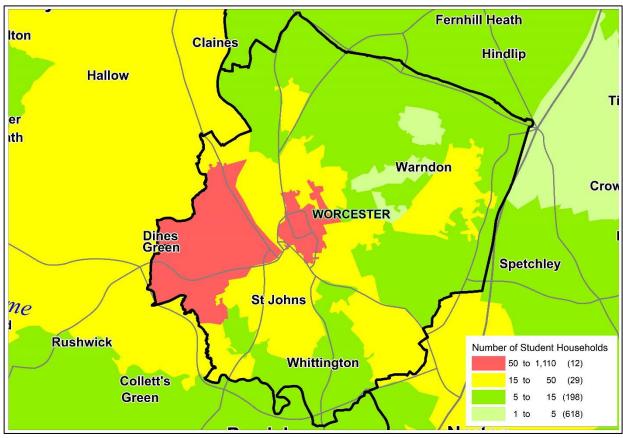
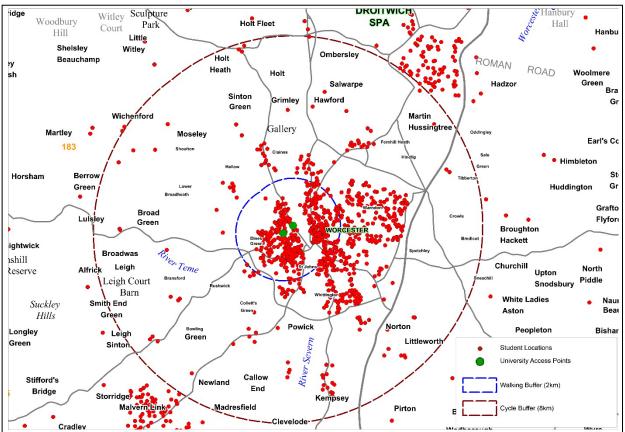


Figure 3-1: Home Location of Students – Within Worcestershire

Figure 3-2: Home Location of Students – Within Worcester







## 4 Inter-Site Travel

4.1 As a result of the layout of the University over several campuses, many staff and students are required to travel between site during the day to attend lectures and access university facilities. The mode of travel used by staff and students for inter-site travel is summarised in Table 4-1.

Table 4-1: Mode of trave	l Used for Inter-Site Trips

Mode of Travel	Staff		Students	
	2011	2015	2011	2015
Bus <sup>1</sup>	2%	2%	-	-
Car	12%	21%	13%	16%
Walk	72%	65%	70%	66%
Cycle	8%	7%	7%	7%
University Vehicle	2%	3%	0%	-
Other	4%	2%	10%	11%2

#### 4.2 Table 4-1 indicates that:

- The proportion of both staff and students walking between sites has decreased;
- The proportion of both staff and students driving between sites has increased;
- Levels of cycling between sites has remained relatively consistent.

#### Table 4-2: Facilities to Assist with Inter-Site Travel

Mada of Travel	Staff		
Mode of Travel	2011	2013	2015
University loan bikes	15%	8%	9%
Upgraded footpaths/crossings	15%	11%	13%
University car parking closer to City Campus	14%	17%	11%
More frequent bus services	13%	11%	10%
Upgraded cycle paths	13%	12%	12%
New bus route along Hylton Road	11%	n/a	n/a
More frequent Unishuttle bus route along Hylton Road	n/a	24%	25%
University pool vehicles	10%	10%	9%
Secure cycle parking	8%	8%	7%
Other	-	-	5%

<sup>4.3</sup> Members of staff were also asked to identify what additional facilities could be provided by the university to assist with inter-site travel. The resultant suggestions are summarised in Table 4-2.

 $<sup>^1</sup>$  Option for bus travel not included within student survey therefore assumed to be included within 'Other'  $^2$  Including 6% car share

4.4 Following the publication of the 2013 Travel Plan, a Unishuttle Bus (31B) has been provided, with approximately a quarter of respondents in 2013 and 2015 desiring a more frequent service. It should also be noted that the number of staff responding with 'University car parking closer to City Campus' decreased by 6% from 2013.

## 5 Carbon Emissions

5.1 Information regarding carbon emissions for commuting trips to and from the University has been provided by the University of Worcester. The information accounts for the mode of travel and also the size of the engine and fuel type used by those that drive. The change in carbon emissions over the previous 5 years is detailed in Table 5-1.

	Carbon Emissions (KgCO <sub>2</sub> )				
Mode of Travel	2011-12	2012-13	2013-14	2014-15	2015-16
Car (Combined)	5,444,496	5,043,662	4,752,444	-	5,094,864
Motorcycle (Average petrol Motorcycle unknown engine)	83,689	53,235	93,251	-	84,825
Bus (Average local bus)	143,171	315,954	272,934	-	164,747
Train (National Rail)	643,507	729,494	704,334	-	624,215
Total	6,314,863	6,142,347	5,823,000	5,683,300	5,968,650

#### Table 5-1: Total Carbon Emissions from Commuting Travel (Staff and Students)

5.2 The results of the survey indicate that while carbon emissions have decreased by approximately 5% since 2011/12, the rise from 2014/15 represents a 5% increase. The proportion of total carbon emissions by mode has also be provided and this is provided in Table 6-2.

### Table 5-2: Total Carbon Emissions from Commuting Travel (Staff and Students)

Proportion of Greenhouse	Carbon Emis	sions (KgCO <sub>2</sub> )
Gas Emissions by Mode	2012-13	2015-16
Car	82%	85%
Motorcycle	1%	1%
Bus	5%	3%
Train	12%	10%
Total	100%	100%

5.3 The percentage of carbon emissions by car has increased by 3%, offset by decreases in Bus and Train emissions.

## 6 Progress to Targets

A number of actions were detailed in the previous iteration of the Travel Plan, covering a range of categories. The actions, as well as the current progress towards completion, is summarised in Table 6-1, with a key provided below.

Symbol	Explanation
$\checkmark$	Action complete
$\checkmark$	Action partially complete/ ongoing
×	Action not complete/ abandoned

#### Table 6-1: Summary of Travel Plan Actions

Action	Progress	Complete?
Travel Plan Awareness		
Prepare Travel Plan materials to a clear and consistent design	All sustainability messaging using consistent style	$\checkmark$
Develop a Travel Plan section on the University website	Complete on both sustainability pages and main university find us pages	$\checkmark$
Prepare travel option information	Walk, cycle and sustainable travel option promoted. Individual advice given if students or staff ask, many promotional events take place, primarily at the start of the semester and February 'Go Green Week	$\checkmark$
Collate web links to facilitate personalised journey planning advice	Net Nav app promoted instead	-
Erect Travel Plan information boards	New style of maps now in place, and production of first board to go in St John's in progress	$\checkmark$
Maintain awareness of the Travel Plan	As above	$\checkmark$
Parking		
Coordinate a car parking working group to review how parking is managed	Never established, however car parking is always under review	$\checkmark$
Regularly assess car parking provision across the University Campuses	As above	$\checkmark$
Introduce a system of flexible permits	Under review, number plate recognition systems are being investigated	$\checkmark$
Public Transport		

Action	Progress	Complete?
Provide bus maps and timetabling information	Bespoke maps designed, poster and fold out versions created	$\checkmark$
Promote existing discounts available to staff and students	First bus offers rescinded in summer 2015, with attempts to revoke that decision ongoing	$\checkmark$
Liaise with public transport operators to identify potential for further discounts and route improvements	Under review. Real-time info boards are being installed as a joint WCC and UoW project	$\checkmark$
Investigate the potential for providing season ticket loans to staff	Not achieved	×
Improve the bus stop waiting area on the St John's Campus	A new shelter has been installed	$\checkmark$
Walking and Cycling		
Promote existing walking and cycling facilities and initiatives	Maps produced and on-street signage installed	$\checkmark$
Review the use of existing facilities to identify areas for future investment	Bike loan has been extended, City Council currently considering joining	$\checkmark$
Promote uptake of loan bike scheme	Bikes have been replaced, and number of bikes increased. System has been more automated. 3 <sup>rd</sup> tender for service about to commence	$\checkmark$
Set up facility to allow walkers and cyclists to find 'buddies' to accompany them	Never happened due to lack of demand	×
Set up walking and cycling groups subject to demand	<i>"</i>	×
Further investigate the potential introduction of tax- free cycle purchase	Cycle to work scheme for staff	$\checkmark$
Continue to liaise with local authorities with regard to improving signage of routes	Achieved	$\checkmark$
Car Share		
Promote existing web-based car share database	Achieved	$\checkmark$
Consider implications of an emergency ride home scheme	No Demand	×
Review demand for priority spaces for car sharers and identify suitable locations for additional provision	Under review. Was agreed however due to pressure parking revoked at the last minute	×
Reducing the Need to Travel		

Action	Progress	Complete?
Promote awareness of video conferencing	All students and staff are to have access to Skype from their own PC	$\checkmark$
Ensure video conferencing equipment is Accessible	As above	$\checkmark$
Ensure all new computer equipment facilitates video conferencing	Achieved	$\checkmark$
Investigate location independent working	Staff have been offered this, with one member taking it up	$\checkmark$
Investigate potential for increased use of the Virtual Learning Environment	VLE regularly used by academic staff	$\checkmark$
Collect data on frequency and volume of Location Independent Working	Not applicable – only one staff has taken it up so far	$\checkmark$
Review use of fleet vehicles and consider investment in low emission vehicles	Significant increase in use of fleet vehicles, many high carbon emitters. More recently small electric utility vehicles have been procured to supplement re-used milk floats	×
Collect data in relation to delivery and contractor vehicle movements	Never implemented	×
Liaise with suppliers regarding potential use of low emission vehicles	Work on flexible framework underway, with good liaison with key suppliers	$\checkmark$
Provide sustainable travel advice to contractors	Never implemented	×
University Business Travel		
Coordinate a travel policy group which examines various options for business travel and sets parameters for business travel decisions	As for 'review use of fleet vehicles etc.'	×
Discourage the use of grey fleet vehicles	A new expenses system is currently being rolled out that will capture data	$\checkmark$
Consider introduction of pool cars for staff use	Still under review	×
Collect and disseminate data on use of hire cars and grey fleet	Achieved	$\checkmark$
Encourage use of trains to replace air travel	New travel contract has been implemented	$\checkmark$
Student Home to Term Time Residence Travel		

Action	Progress	Complete?
Investigate potential for discounted public transport fares over longer distances	Investigated, only one university has managed to set up this and then only for staff	×
Establish an informal car sharing service	Car share scheme implemented for staff and students	$\checkmark$
Liaise with national car/van hire firms to identify the potential for discounted one- way hire	Never implemented	×
Investigate whether good quality Skype facilities in halls would reduce the need for students to travel home during term time	Skype provided for all students	$\checkmark$

Overview

6.2 The original Travel Plan produced by PJA outlined a number of quantitative Travel Plan targets relating to the travel patterns of both staff and students. Table 6-2 details these targets and the current progress towards these targets:

#### **Quantitative Targets**

#### Table 6-2: Progress Towards Targets

Target	Current Progress	On Track?
"A 20% reduction in the percentage of staff travelling by car alone to work by 2018 - i.e. a reduction from 55% in 2012 to 44% by 2018";	Current survey data indicates that the percentage of staff travelling by car alone to work has increased to 58% in 2015.	×
"A 20% reduction in the percentage of students travelling by car alone to the University by 2018 – i.e. a reduction from 24% in 2012 to 19% by 2018"	The percentage of students travelling by car alone have increased back to pre-2018-2018 Travel Plan levels (30%)	×
"A 10% reduction in the percentage of students travelling between their home address to term time address by car alone by 2018"	The percentage of students travelling in their own car has increased from 14% in 2013 to 19% in 2015	×
"Maintain the ratio of business air travel emissions to international student FTE at the baseline of 68.5 tonnes CO <sub>2</sub> "	Air travel emissions have increased substantially to 143.4 tonnes $CO_2$ , an increase of over 100%	×
"A 5% reduction in the carbon emissions form fleet vehicles by 2018 from a baseline of 36.9 tonnes CO <sub>2</sub> "	2014 survey data indicates that the carbon emissions attributed to Fleet vehicles is currently 32.22 tonnes, a 13% reduction from the 36.9 tonnes baseline. It should be noted however that emissions have increased by 2% from 2012 levels, as well as experiencing a continual increase from 2009/10.	~

Target	Current Progress	On Track?
"A 5% reduction in the carbon emissions from car hire by 2018 from a baseline of 41.1 tonnes CO <sub>2</sub> "	The most recent survey data provided by UoW (2014) shows that current emission levels are 27.57 tonnes of $CO_2$ . This figure is lower than the baseline target outlined in the original Travel Plan, and also represents a 22% reduction form the 2012/13 survey.	$\checkmark$
"A 20% reduction in the total business undertaken in 'Grey Fleet' vehicles from the 2011/12 baseline level"	Information regarding the 2011/12 baseline level has not been provided, however there has been a 68% decrease in emissions to 25.07 tonnes from Grey Fleet vehicles between 2013 and 2014.	$\checkmark$

6.3 The previous Travel Plan acknowledged the requirement for absolute reductions in carbon emissions associated with transport at the university, while balancing the importance of future growth at the university. Recent survey data indicates that progress towards these targets has been unsuccessful, with only reductions in emissions as a result of car hire and grey fleet vehicles.

## 7 Actions to Optimise the University of Worcester Travel Plan 2016 – 2018/19

### Cars

- 7.1 The previous section gave a commentary on our progress towards the targets outlined in the previous Travel Plan and earlier sections summarised the measurement and performance of our carbon emissions reductions. Given the impact of the estate and campus growth, it is important that a robust approach is taken to the assessments and communication of performance. Indirect carbon emission activities within the scope of the travel plan have increased over the period.
- 7.2 More staff now drive on their own to work, car sharing is down, and 58% come in single occupancy vehicles a 6-year high. Staff cycling is low and lower since 2009, bus usage static but low. There's a small increase in staff walking to work, up to 23% from 18% in 2009.
- 7.3 There are opportunities if we consider our parking policies to encourage a trend to sustainable travel for staff. 30% of staff who currently drive on their own to work travel less than 4 miles, this has gone up 13% since 2013. Staff are not interested in car sharing so changes to parking policies and rates maybe the incentive required to change habits.
- 7.4 The number of students travelling on their own to campus has also increased to 19% up from 14% in 2013, 6% of students go home every weekend.
- 7.5 Changes to our parking policies could involves investment of automatic number plate recognition, the benefit would be people would only pay on the days they parked, and this requires investment. Immediate changes could be to further restrict access to procuring a permit by postcode. This is currently in place for students who must be resident at least 1 mile from campus to be eligible for a permit. The data shows significant numbers of students and staff drive despite being within walking/cycling distance of campus.

7.6 Another approach taken by Universities with significant traffic congestion and pollutions issues (as we have in Worcester) and that's significant car parking charges based on salaries. We have this system in place charges are banded by salary but are relatively low by comparison to others in the sector. £140 for staff earning over £35,000 (gross salary), £128 for staff earning between £20,000 and £35,000 (gross salary) and £75 for staff earning up to £20,000 (gross salary).

University	Staff Charges / system	Student Charges /system	Visitors and Contractors
Belfast - Queens	Charges based on Co2 emissions. Full time staff charges range from £12 per month for 0 road tax to £32 per month for highest rate road tax. (£144 - 384)	Student Parking Not Allowed Parking @ Student Residences only, 50p @ day.	No charge for visitors or contractors
Birmingham City	Charges based on Co2 emissions.	Student pay as you go	No charge for visitors or contractors
Bristol	0.83% of salary for all staff 2 mile exclusion zone	Student Parking Not Allowed Parking @ Student Residences £99 per yr.	Visitors: Full day parking £7 or £3.50 half day Contractors: £8.46 a day
Cardiff	Salary sacrifice scheme 3 levels based on salary Low £196, Med £300, High £345 Eligiblity criteria set on length of service with the University.	Student Parking Not Allowed £180 per academic session (Oct - Jun)	Visitors: no charge but limited space Contractors: £330 per vehicle per annum
Durham	No charge, no current criteria but process under review	No charge but priority given to students with medical needs	No charge
Keele	0.3% of salary.	Zoned parking charges from £20 to £90 Resident students not eligible	Visitors P&D - £1 up to 2 hours - £6 per day Contractors: No charge (yet!)
Leeds	Charges based on emissions and salary band. 2 mile exclusion zone. Point system - extra points for car sharing, requiring car for business use, shift work, distance	Student Parking Not Allowed	Visitors: £7 per day during core hours, standard tariff outside core hours Contractors: As visitors but regular contractors pay an annual fee of £725
Liverpool	£2.17 per day from salary. No criteria	£6 per day in visitors car park or can purchase a card in advance monthly. ½ yearly, annual.	£2.00 first hr, £1 per hour after that. Over 4 hrs = £6 per day.
Manchester	Salary banded between £150 and £400 pa.	Student Parking Not Allowed Can park as a visitor in public car parks if they wish	Visitors £2 per day (under review) Contractors £50 per month.
Newcastle	Permit £50 per annum or £4 per day pay & display	Student Parking Not Allowed	Contractors assessment required the £4 per day, daily meter charge
Sheffield	Location based (3 locations) Central campus £804 for a dedicated space (criteria based) £480 or £2 per day for a licence to hunt space (criteria based) £5 per day pay & display (must live more than 1 mile away) 3 mile exclusion zone Residential campus £120 per annum	Charges same as staff	Visitors: £3.40 per day paid for by the dept they are visiting. Contractors: £7 per day
Southampton	Range of charges based on pay grade	Student Parking Not Allowed, only permitted in exceptional circumstances (med/disability)	Visitors £1 per <u>br</u> Contractor permits not charged but space justified based on work being undertaken
Wolverhampton	No charge, no criteria	No charge. No student access to City campus car parks	No charge
York	0.6% of salary. No current criteria but under review	£35 per academic year Distance criteria	Visitors: £6 per day or 31 per hour Contractors: £400 per year, £40 per month or £6 per day

7.7 Examples from a range of universities is given below

In a city with extensive out of town park and ride provision the University of Oxford is implementing the following, however a range of 0.3 - 0.8 % of salary is more usual. A stepped approach may be a useful solution for Worcester if we were to make any changes to our parking policy.

University of Oxford

- With effect from 1 October 2016, the annual charge shall be equivalent to 1.25% of the permit holder's gross contractual salary;
- With effect from 1 October 2017, the annual charge shall be equivalent to 1.5% of the permit holder's gross contractual salary;

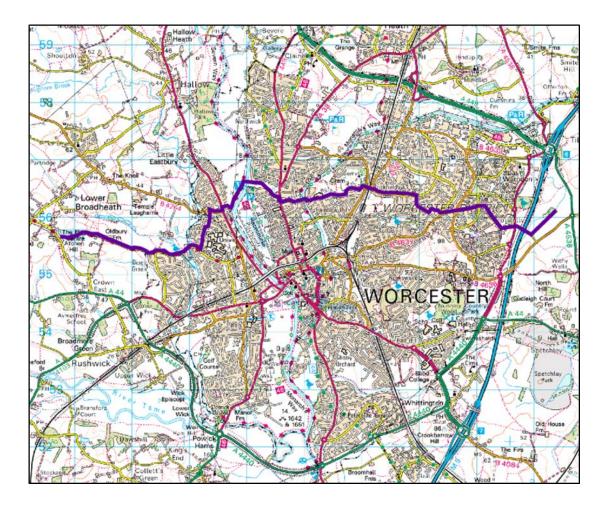
- With effect from 1 October 2018, the annual charge shall be equivalent to 1.75% of the permit holder's gross contractual salary
- 7.8 Progress towards current targets indicates that the percentage of staff travelling by car alone to work has increased to 58% in 2015. Our target of: "A 20% reduction in the percentage of staff travelling by car alone to work by 2018 i.e. a reduction from 55% in 2012 to 44% by 2018" is not being met;
- 7.9 The percentage of students travelling by car alone have increased back to pre-2013-2018 Travel Plan levels (30%) Again the target of "A 20% reduction in the percentage of students travelling by car alone to the University by 2018 – i.e. a reduction from 24% in 2012 to 19% by 2018" is not being met.
- 7.10 An immediate review of parking charges and policies could assist towards achieving these targets without further investment.
- 7.11 Car share use is static or declining in staff. Consideration to making some bays dedicated for car sharers as an incentive could be reconsidered. If this is brought in, then it should be at a time when pressure on parking is not at its height and the temporary suspension of these bays should be available should this be deemed necessary for car park operational reasons.

## **B**uses

- 7.12 Co-operation from First Bus has changed in the last couple of years, and advantageous ticketing options for students and staff have been withdrawn, now only available on 31 service, no-longer city wide. With the imminent introduction of real time bus data a significant decision to terminate all journeys at the Bus station has had the impact of doubling the cost of journeys from east to west i.e. from campus to the hospital. This was brought in because of the acknowledged significant issues with congestion that predicting journey times across the city/river is not possible. At bus stop real time data showing significant bus delays was not considered useful for passengers.
- 7.13 Also since 18th April 2016, without prior notice the 31 Service which had been put in place travelling down the Hylton Road has ceased. First have supplied UW with actual bus usage data for the 31 service and so far this does not seem to affected bus usage figures. This will be kept under review by UW and First Bus.
- 7.14 On request First Bus are reviewing their ticketing options and are considering re introducing the city wide multi journey ticket for staff and students and re allowing UW to sell tickets on campus. Year round tickets are good value and remained available for all staff and students. Joint marketing and promotions have also been agreed.
- 7.15 These measures along with the installation of the 3 real-time bus service data on St Johns are the promised as is the reinstatement of better advance communications with First Bus. Also offered are continued on campus promotions at key events such as Welcome and Go Green weeks. These measures should be adequate to stem any possible decline in bus usage numbers.

## Walking and Cycling

- 7.16 It is estimated that 24% of staff live within a 2km walking distance of the site (1% less than 2013), with 45% resident within an 8km cycle distance (1% less than 2013). Figure 2-3 shows a 2km and 8km buffer from the site.
- 7.17 It is estimated that 45% students live within a 2km distance of the site (10% more than in 2013), with 52% resident within an 8km cycle distance (9% less than 2013). Figure 2-3 shows a 2km and 8km buffer from the site. Given that approximately 10% more students live within 2km and 8km walking catchments than previously, there is clearly potential for a modal shift to more sustainable modes.
- 7.18 Worcestershire Local Transport Plan 4 (LTP4) Cycling and Walking Investment Strategy Phase 1 draft has been shared with UW. This document has the support of Worcestershire County Council and its partners in Worcestershire Local Enterprise Partnership and the Greater Birmingham and Solihull Local Enterprise Partnership they all recognise the significant and far-reaching benefits of promoting active travel modes. A number of strategic schemes are proposed to support economic activity and sustainable growth in Worcestershire, and Worcester city.
- 7.19 Four superhighways are proposed the most significant for UW being CW4. CW 4 –Worcester East/West Active Travel Superhighway This involves the linking up of a number of existing stretches of walking and cycling links to create a continuous east/west route between the Elgar Birthplace and Worcester 6 Business Park. This would include the provision of a new walking and cycling bridge over the River Severn at Gheluvelt Park, and a grade separated link over the A4440 and M5 into Worcester 6 Business Park. This runs next to St Johns campus and University Court. It also provide better connectivity to University Park. This is currently in draft and is being discussed with councillors and to-date has received all party support.



## Trains

- 7.20 WCC have also shared their plans for sustainable travel options for Worcester. Once members have been briefed the documents will be available for adding to this update. In brief a new road bridge is planned for Worcester City Centre, from MacDonald's to Severn Vue, the bus station is removed, buses do a circular route, but no station stop. More of the centre is fully pedestrianised, a new green space provided opposite the Lowesmore developments, all small city centre carparks removed, one new large multi-story added on City Walls Road. Traffic coming into Worcester from the east side effectively comes to a T junction at the new road bridge. A new train station is provided at Rushwick and trains travel (not Bus) becomes the main public transport mode for the City.
- 7.21 These developments will have a significant impact on UW and it's suggested that a major review of the TP is undertaken once LTP4 has been adopted. However, master planning for our new sites and changes to car parking policies could take note of these developments to ensure best advantage is made of these developments.